Claims

[001] LED, in which at least one LED die (3) is arranged on an LED PCB (6) with a die attach (4) and the LED PCB (6) has, on the side lopposite to the LED die (3), rear side contacts (7) which if appropriate are formed as plug contacts, characterized in that the rear side contacts (7) cover over at least the half area, preferably the entire area apart from the necessary exceptions, of the LED PCB (6). (Fig. 1-3)

[002] LED according to claim 1, characterized in that the rear side contacts (7) are thermally, and if appropriate electrically, connected with the contact areas (conductor paths 5) on the side of the LED PCB (6) towards the LED die, to the lateral side of the LED PCB. (Fig. 2)

[003] LED according to claim 1, characterized in that the LED PCB (6) is a metal core board and in that the LED die (3) is applied directly on to the metal core. (Fig. 3)

[004] LED according to claim 1, characterized in that the LED PCB (6) is a metal core board and in that there is arranged between the conductor paths and the metal core an electrically non-linear insulator material.

[005] LED according to any of claims 1 – 4, characterized in that the LED die is mounted face down on the LED die.

[006] LED light source having one or more LEDs according to any of claims 1 to 5 arranged on a board (9) or on a plug, wherein the board (9) has contact areas (conductor paths 8), or the plug has contacts, with which the LEDs are contacted, characterized in that the rear side contacts (7) of the LEDs are soldered with the contact surfaces or with the contacts on at least the half area of the LED PCB, preferably over the entire area apart from the necessary exceptions. (Fig. 1)

[007] LED light source according to claim 6, characterized in that a cooling body (11) is arranged on the rear side of the board (9). (Fig. 1)

[008] LED light source according to claim 7, characterized in that the board (9) and/or the LED PCB (6) has through-contacts for increasing the thermal conductivity, whereby preferably the through-contacts have a diameter of less than 100 µm.

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